	Application No.	Applicant(s)
Notice of Allowability	10/737,280	TRIMBERGER, STEPHEN M.
	Examiner	Art Unit	
	Esaw T. Abraham	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the amdt filed on 07/13/06*.

2. ☒ The allowed claim(s) is/are *1-10 and 24-31 (renumbered as 1-18)*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *09/21/06* .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes and

or additions be acceptable to applicant, an amendment may be filed as provided by 37

CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no

latter than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Lois Cartier on 09/21/06.

2.   The application has been amended as follows:

As per claims 11-23 and 32-43:

Line, 1 Please change "Withdrawn" to ---Cancelled---

Examiner's statement for reason for allowance

Claims 24-31 have been previously allowed.

Claims 1-10 have been allowed.

The following is an examiner's statement for allowance:

As per claim 1:

The prior art of record (Yada et al.) (U.S. PN: 6,941,505) teach or disclose in

figure 7 teach a procedure used or executed when user data and ECC codes are written

into their corresponding area (20B) as other array data in association with one another.

When an array of user data to be written is specified and a process for writing data with

ECC codes is designated, the user data read. An array of user data is read into a

memory as illustrated in FIG. 7(B) by way of example. Next, ECC codes are generated

with respect to user data as illustrated in FIG. 7(A) by way of example and stored as

another data array DA3 (S12). The writing of both data arrays DA1 and DA3 into the ·

corresponding area 20Ba of the flash memory is carried out (S13 through S17). Write

processing is similar to the procedure of Steps S4 through S7 referred to above (see

col. 17, lines 54-67). In addition, the prior art of record, McAlpine teaches a single write

descriptor (262) transfers all valid data to the RAM core (26) from the in queue registers

(52) associated with the particular port (18) corresponding to the descriptor (262). In

this transfer, the data is routed through the multiplexer (152) and the position shifter

(154). These elements provide for writing the valid data into the RAM array (56) starting

at any column of an addressed row and the memory circuit (36) provides for placing in

the RAM array (56) a block of data, the size of the block being independently selectable

and the placement of the block in the RAM array (56) starting at an independently

selectable position. However, the prior art taken singly or in combination fail to teach,

anticipate, suggest, or render obvious a method of utilizing a configurable random

access memory (RAM) array in a programmable device, the RAM array comprising a

user data portion and an error correction code (ECC) portion, the method comprising:

receiving a user data word and a user address, a number of bits in the user data word

varying based on a selected virtual width for the RAM array; writing the user data word

to a configurable subset of the user data portion of the RAM array, the configurable

subset being determined by the selected virtual width and the user address; reading,

while writing the user data word, from the RAM array at the user address a subset of a

stored memory word, the stored memory word having a non-configurable width, the stored memory word including the user data word and the subset of the stored memory word; generating ECC data based on the user data word and the subset of the stored memory word, the ECC data including a fixed number of bits; and writing the ECC data to the ECC portion of the RAM array at the user address. Consequently, claim 1 allowed over the prior art.

Claims **2-10** which is/are directly or indirectly dependent/s of claim 24 are also allowable over the prior art of record.

Conclusion

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Esaw Abraham whose telephone number is (571) 272-3812. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are successful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for after final communications.

Information regarding the status of an Application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or PUBLIC PAIR. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have
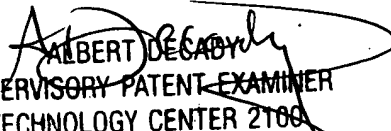
questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

Esaw Abraham

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Art unit: 2133

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